

Mr. Michael T. Davis Pre-Calculus	2.1, 2.2, 2.3 Units Quiz Practice December 7, 2015
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Directions: Be careful to **give factors** when the question says “Factor” and **give zeros or solutions** when the question says “Solve”.

1. Factor $5x^2 + 29x - 6$

2. **Solve** $4x^2 - 25 = 0$

3. Factor $n^2 + 10n + 25$

4. **Solve** $x^2 - 6x - 16 = 0$

5. Factor $y^3 - 27$

6. **Solve** $7m^2 - 21m = 0$

7. Factor $2y^3 + 6y^2 - 36y$

8. **Solve** $x^4 - 5x^2 - 36 = 0$

9. **Factor** $x^3 + 3x^2 - 4x - 12$

10. **Solve** $x^3 - 3x^2 - 13x + 15 = 0$

11. A polynomial function of degree 3 has the solution set $\{-1, 3, -5\}$. Determine the equation of the function in standard form.

12. A polynomial function of degree 3 has the solution set $\left\{0, \frac{-1}{2}, 4\right\}$. Determine the equation of the function in standard form.

13. A polynomial function of degree 3 has the solution set $\{-3, 2\}$ where 2 is a double root. Determine the equation of the function in standard form.